

=> FILE REG

FILE 'REGISTRY' ENTERED AT 10:22:37 ON 14 JAN 2004
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STRUCTURE FILE UPDATES: 12 JAN 2004 HIGHEST RN 636984-67-3
DICTIONARY FILE UPDATES: 12 JAN 2004 HIGHEST RN 636984-67-3

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

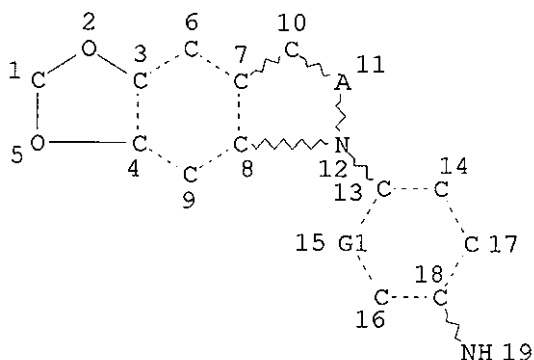
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> D QUE L13

L11

STR



*no structures when
2 oxygens are in
a ring*

VAR G1=N/C

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 19

STEREO ATTRIBUTES: NONE

L13 0 SEA FILE=REGISTRY SSS FUL L11

=> FILE HCAPLUS

FILE 'HCAPLUS' ENTERED AT 10:22:54 ON 14 JAN 2004
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FILE COVERS 1907 ~ 14 Jan 2004 VOL 140 ISS 3
FILE LAST UPDATED: 13 Jan 2004 (20040113/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

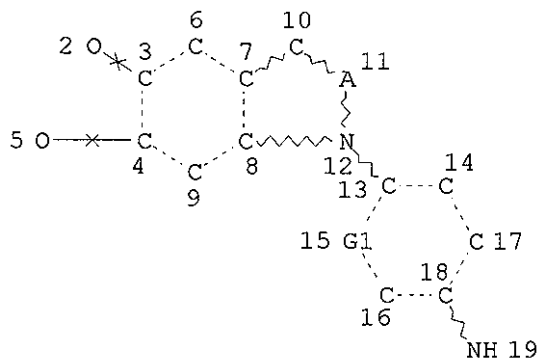
=> S L16

L17 8 L16

=> D QUE

L14

STR



11 structure/ answers when offgens are ring or chain

VAR G1=N/C

NODE ATTRIBUTES:

NSPEC IS RC AT 2

NSPEC IS RC AT 5

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 18

STEREO ATTRIBUTES: NONE

L16 11 SEA FILE=REGISTRY SSS FUL L14

L17 8 SEA FILE=HCAPLUS ABB=ON L16

8 CA references from the 11 structures

=> => D L17 ALL 1-8 HITSTR

L17 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:516257 HCAPLUS

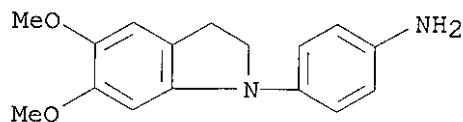
DN 137:95161
ED Entered STN: 11 Jul 2002
TI Indole/indoline hybrid dyes and their application to hair
IN Naumann, Frank; Hollenberg, Detlef; Hoeffkes, Horst; Rose, David
PA Henkel Kgaa, Germany
SO Ger. Offen., 22 pp.
CODEN: GWXXBX
DT Patent
LA German
IC ICM C09B007-00
ICS C09B069-00; A61K007-13; A61K007-021
CC 41-5 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 27, 62

applicant

FAN.CNT 1

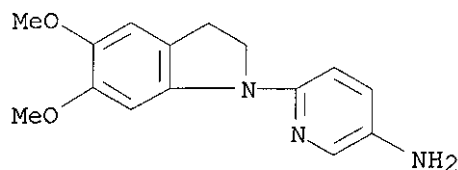
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|------------------|----------|
| PI | DE 10100938 | A1 | 20020711 | DE 2001-10100938 | 20010110 |
| | WO 2002055609 | A2 | 20020718 | WO 2002-EP13 | 20020103 |
| | WO 2002055609 | A3 | 20021227 | | |
| | W: AU, BR, CA, CN, CZ, HU, JP, NO, PL, RU, SK, US, VN | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR | | | | |
| | EP 1349535 | A2 | 20031008 | EP 2002-716059 | 20020103 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR | | | | |
| PRAI | DE 2001-10100938 | A | 20010110 | | |
| | WO 2002-EP13 | W | 20020103 | | |
| OS | MARPAT 137:95161 | | | | |
| AB | Indole and indoline hybrid dyes and their precursors of the structure XZY (X = a group derived from a derivative of indole or indoline as melanin precursor; Y = a group from an oxidative dye coupler or developer or a derivative of indole or indoline as melanin precursor; Z = direct bond or spacer group) are suitable for the dyeing of keratinic fibers, in particular human hair. In an example, 4-(5,6-dimethoxy-1-indoliny)aniline hydrochloride was prepared from 4-nitrofluorobenzene and 5,6-dimethoxyindoline, with formation and reduction of the intermediate 5,6-dimethoxy-1-(4-nitrophenyl)indoline. | | | | |
| ST | indole indoline hair dye prodn | | | | |
| IT | Alcohols, uses | | | | |
| | RL: TEM (Technical or engineered material use); USES (Uses) (C16-18, Stenol 16/18; surfactant; indole/indoline oxidative hair dyes containing) | | | | |
| IT | Alcohols, uses | | | | |
| | RL: TEM (Technical or engineered material use); USES (Uses) (C16-18, ethoxylated, Cetareth 20; surfactant; indole/indoline oxidative hair dyes containing) | | | | |
| IT | Surfactants | | | | |
| | (amphoteric; indole/indoline oxidative hair dyes containing) | | | | |
| IT | Surfactants | | | | |
| | (anionic; indole/indoline oxidative hair dyes containing) | | | | |
| IT | Surfactants | | | | |
| | (cationic; indole/indoline oxidative hair dyes containing) | | | | |
| IT | Hair preparations | | | | |
| | (dyes, direct-acting; production of indole/indoline hybrid dyes and their application to hair) | | | | |
| IT | Hair preparations | | | | |
| | (dyes, oxidative; production of indole/indoline hybrid dyes and their | | | | |

- application to hair)
- IT Surfactants
(nonionic; indole/indoline oxidative hair dyes containing)
- IT Surfactants
(zwitterionic; indole/indoline oxidative hair dyes containing)
- IT 90-15-3, 1-Naphthol 108-46-3, Resorcinol, uses 541-69-5,
m-Phenylenediamine dihydrochloride 591-27-5, 3-Aminophenol 66422-95-5,
2-(2,4-Diaminophenoxy)ethanol dihydrochloride 74918-21-1,
1,3-Bis(2,4-diaminophenoxy)propane tetrahydrochloride
RL: TEM (Technical or engineered material use); USES (Uses)
(coupler; indole/indoline oxidative hair dyes containing)
- IT **441349-87-7P 441349-88-8P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)
(dye; production of indole/indoline hybrid dyes and their application to
hair)
- IT 441349-89-9P 441349-90-2P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)
(intermediate; production of indole/indoline hybrid dyes and their
application to hair)
- IT 350-46-9, 4-Nitrofluorobenzene 4548-45-2, 2-Chloro-5-nitropyridine
15937-07-2, 5,6-Dimethoxyindoline
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; production of indole/indoline hybrid dyes and their
application to hair)
- IT 9004-82-4, Texapon N28 83138-08-3, Dehyton K
RL: TEM (Technical or engineered material use); USES (Uses)
(surfactant; indole/indoline oxidative hair dyes containing)
- IT **441349-87-7P 441349-88-8P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)
(dye; production of indole/indoline hybrid dyes and their application to
hair)
- RN 441349-87-7 HCAPLUS
- CN Benzenamine, 4-(2,3-dihydro-5,6-dimethoxy-1H-indol-1-yl)-,
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

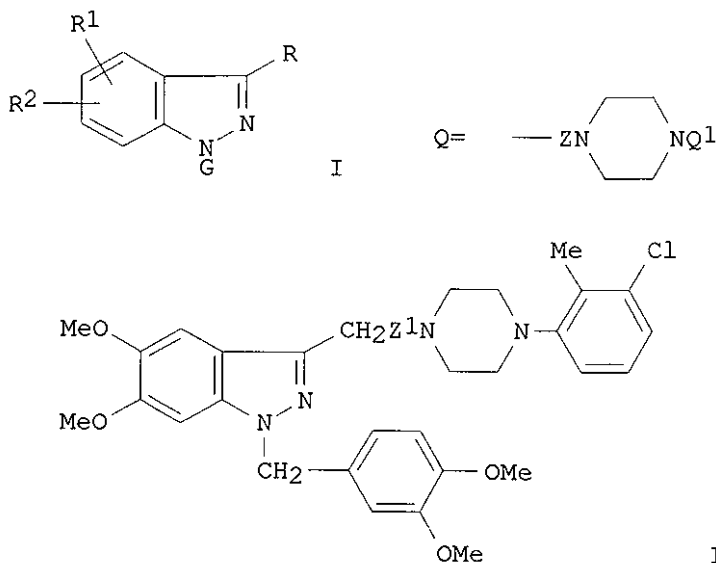
- RN 441349-88-8 HCAPLUS
- CN 3-Pyridinamine, 6-(2,3-dihydro-5,6-dimethoxy-1H-indol-1-yl)-,
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L17 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:694212 HCAPLUS
DN 125:328730
ED Entered STN: 25 Nov 1996
TI Preparation of 3-(piperazinoalkyl)indole derivatives as calmodulin antagonists
IN Hasegawa, Atsushi; Makino, Tooru; Yamamoto, Kenjiro
PA Daiichi Seiyaku Co, Japan
SO Jpn. Kokai Tokkyo Koho, 49 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C07D231-56
ICS C07D401-06; C07D401-12; C07D401-14; C07D403-06; C07D403-12; C07D405-06; C07D405-12; C07D405-14; C07D417-06; C07D491-048; C07D491-056
ICA A61K031-415; A61K031-495; A61K031-505
ICI C07D401-06, C07D213-16, C07D231-56; C07D401-12, C07D213-16
CC 28-17 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|------|----------|-----------------|----------|
| PI | JP 08225535 | A2 | 19960903 | JP 1995-294071 | 19951113 |
| PRAI | JP 1994-280963 | | 19941115 | | |
| OS | MARPAT 125:328730 | | | | |
| GI | | | | | |



- AB The title compds. [I; R = Q; wherein Z = single bond, C1-3 alkylene, C2-4 alkenylene, C1-3 hydroxyalkylene, CO, COCO, C1-2 alkylene containing one CO group at the end or middle of the C chain; Q1 = C1-8 alkyl, C3-8 cycloalkyl, (un)substituted aryl, heterocyclyl, diarylmethyl, or aryl-C1-6 alkyl; R1, R2 = C1-6 alkyl or alkoxy, CF₃, CF₃CH₂, CF₃O, CF₃CH₂O, C1-6 alkylthio, alkylsulfinyl, or alkylsulfonyl, C1-6 alkylcarbonyl, C2-7 alkanoylamino, NH₂, mono- di(C1-6 alkyl)amino, OH, halo, C2-6 perfluoroalkyl, cyano, NO₂, CO₂H, C1-6 alkoxy carbonyl, tetrazolyl, SO₂NH₂, methylenedioxy, ethylenedioxy, morpholinosulfonyl, piperazinosulfonyl, 4-(C1-6 alkyl)piperazinosulfonyl, 4-[mono- or di(C1-6 alkyl)amino]piperidino, 4-aminopiperidino; G = C1-6 alkyl, (un)substituted Ph, PhCO, PhCOCH₂, α-hydroxybenzyl, phenyl-C1-6 alkyl, 5-membered aromatic heterocyclyl or heterocyclyl-C1-6 alkyl containing heteroatoms (a) N, O, or S or (b) one or two N and another N, O, or S, 6-membered aromatic heterocyclyl, heterocyclylcarbonyl, or heterocyclyl-C1-3 alkyl containing one or two N, phenylhydroxyalkyl, or 2-phenylethynyl, tetrazolyl, morpholino, etc.] are prepared These compds. possess calmodulin-inhibitory, antihypoxic, or brain edema-improving activity, inhibit delayed neuronal death in hippocampus, and are useful for the treatment of circulatory diseases or brain diseases. Thus, 5,6-dimethoxy-1-(3,4-dimethoxybenzyl)-1H-indazole-3-acetic acid was condensed with 1-(3-chloro-2-methylphenyl)piperazine using di(2-pyridyl) disulfide and Ph₃P in CH₂Cl₂ at room temperature to give an intermediate (II; Z1 = CO), which was reduced by borane-THF complex in THF under reflux to give the title compound II (Z1 = CH₂). The latter compound in vitro showed IC₅₀ of 3.1 μg/mL against Ca/calmodulin-dependent phosphodiesterase.
- ST piperazinoalkylindole prepn calmodulin antagonist; hypoxia treatment piperazinoalkylindole; circulatory disease treatment piperazinoalkylindole; brain disease treatment piperazinoalkylindole
- IT Brain, disease Hypoxia
(preparation of 3-(piperazinoalkyl)indole derivs. as calmodulin antagonists for disease treatment)

IT Calmodulins

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)

(preparation of 3-(piperazinoalkyl)indole derivs. as calmodulin antagonists for disease treatment)

IT Circulation

(disorder, preparation of 3-(piperazinoalkyl)indole derivs. as calmodulin antagonists for disease treatment)

IT 160521-92-6P 160521-93-7P 160522-00-9P 162495-46-7P 162495-48-9P
162495-50-3P 162495-91-2P 162495-92-3P 162495-98-9P 162495-99-0P
162496-04-0P 162496-06-2P 162496-07-3P 162496-23-3P 162496-41-5P
162496-42-6P 162496-43-7P 162496-44-8P 162496-45-9P 183314-91-2P
183314-92-3P 183314-93-4P 183314-94-5P 183314-95-6P 183314-96-7P
183314-97-8P 183314-98-9P 183314-99-0P 183315-00-6P 183315-01-7P
183315-02-8P 183315-03-9P 183315-04-0P 183315-05-1P 183315-06-2P
183315-07-3P 183315-08-4P 183315-09-5P 183315-10-8P 183315-11-9P
183315-12-0P 183315-13-1P 183315-14-2P 183315-15-3P 183315-16-4P
183315-17-5P 183315-18-6P 183315-19-7P 183315-20-0P 183315-21-1P
183315-22-2P 183315-23-3P 183315-24-4P 183315-25-5P 183315-26-6P
183315-27-7P 183315-28-8P 183315-29-9P 183315-30-2P 183315-31-3P
183315-32-4P 183315-33-5P 183315-34-6P 183315-35-7P 183315-36-8P
183315-38-0P 183315-41-5P 183315-45-9P 183315-47-1P 183315-48-2P
183315-49-3P 183315-50-6P 183315-51-7P 183315-52-8P 183315-53-9P
183315-54-0P 183315-55-1P 183315-56-2P 183315-57-3P 183315-58-4P
183315-59-5P 183315-60-8P 183315-61-9P 183315-62-0P 183315-63-1P
183315-64-2P 183315-65-3P 183315-66-4P 183315-67-5P 183315-68-6P
183315-69-7P 183315-70-0P 183315-71-1P 183315-72-2P 183315-73-3P
183315-74-4P 183315-75-5P 183315-76-6P 183315-77-7P
183315-78-8P 183315-79-9P 183315-80-2P 183315-81-3P 183315-82-4P
183315-83-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 3-(piperazinoalkyl)indole derivs. as calmodulin antagonists for disease treatment)

IT 93-03-8, 3,4-Dimethoxybenzyl alcohol 107-14-2, Chloroacetonitrile
108-59-8, Dimethyl malonate 124-63-0, Mesyl chloride 151-50-8,
Potassium cyanide 1822-51-1, 4-Chloromethylpyridine hydrochloride
6315-89-5, 3,4-Dimethoxyaniline 14794-31-1, Ethyl succinyl chloride
29281-06-9 35386-24-4, N-(2-Methoxyphenyl)piperazine 54711-70-5,
1-(3-Chloro-2-methylphenyl)piperazine 98224-26-1, 1-(7-Benzofuranyl)piperazine 103057-10-9, 4-Chloromethyl-1-tritylimidazole
183315-95-9, Methyl 5,6-dimethoxyindazole-3-acetate 183315-96-0
183315-98-2, 4-Morpholinosulfonamidobenzyl bromide

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of 3-(piperazinoalkyl)indole derivs. as calmodulin antagonists for disease treatment)

IT 7306-46-9P, 3,4-Dimethoxybenzyl chloride 68438-33-5P 98205-73-3P
160521-88-0P 160521-89-1P 160521-90-4P 160521-91-5P 160521-95-9P
160521-99-3P 162496-66-4P 183315-84-6P 183315-85-7P 183315-86-8P
183315-87-9P 183315-88-0P 183315-89-1P 183315-90-4P 183315-91-5P
183315-92-6P 183315-93-7P 183315-94-8P 183315-97-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

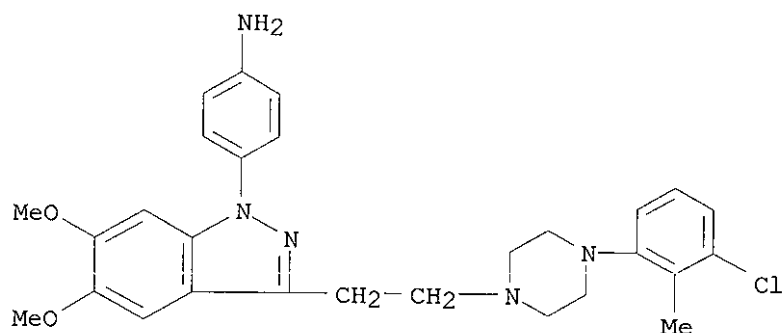
(preparation of 3-(piperazinoalkyl)indole derivs. as calmodulin antagonists for disease treatment)

IT **183315-74-4P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of 3-(piperazinoalkyl)indole derivs. as calmodulin antagonists for disease treatment)

RN 183315-74-4 HCAPLUS

CN Benzenamine, 4-[3-[2-[4-(3-chloro-2-methylphenyl)-1-piperazinyl]ethyl]-5,6-dimethoxy-1H-indazol-1-yl]-, dihydrochloride (9CI) (CA INDEX NAME)



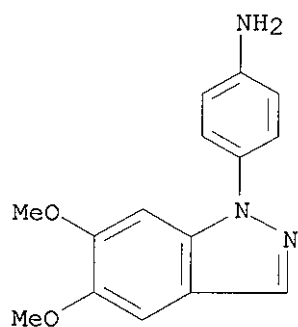
● 2 HCl

L17 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1991:448658 HCAPLUS
 DN 115:48658
 ED Entered STN: 10 Aug 1991
 TI Comparative study of the behavior of 1H-indazoles and 1-(p-aminophenyl)indazoles under electron impact
 AU Erra-Balsells, R.
 CS Fac. Cienc. Exactas Nat., Univ. Buenos Aires, Buenos Aires, 1430, Argent.
 SO Organic Mass Spectrometry (1991), 26(4), 293-7
 CODEN: ORMSBG; ISSN: 0030-493X
 DT Journal
 LA English
 CC 22-8 (Physical Organic Chemistry)
 AB The electron impact mass spectrometric fragmentation pathways for several 1H-indazoles and 1-(p-aminophenyl)indazoles were investigated. An interesting relationship between the substitution pattern in the framework of the indazole derivs. and the fragmentation patterns was observed
 ST mass spectra indazole; aminophenylindazole mass spectra
 IT Mass spectra
 (of indazoles and of (aminophenyl)indazoles)
 IT Substituent effect
 (on mass spectra of indazoles)
 IT 3176-62-3 7746-23-8 7746-24-9 **7746-25-0 7746-26-1**
 7746-27-2 7746-28-3 7746-29-4 7746-30-7 7746-31-8 7788-03-6
 7788-04-7 16640-81-6 16640-83-8 16640-87-2 16640-89-4 16640-90-7
 16640-93-0 16641-04-6 16641-06-8 33101-36-9 110967-33-4
 RL: PRP (Properties)
 (mass spectrum of)
 IT **7746-25-0 7746-26-1**

RL: PRP (Properties)
(mass spectrum of)

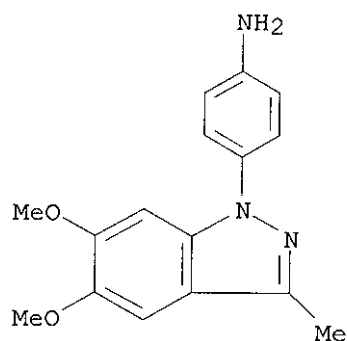
RN 7746-25-0 HCAPLUS

CN Benzenamine, 4-(5,6-dimethoxy-1H-indazol-1-yl)- (9CI) (CA INDEX NAME)



RN 7746-26-1 HCAPLUS

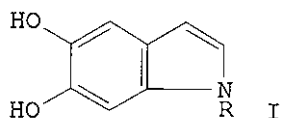
CN Benzenamine, 4-(5,6-dimethoxy-3-methyl-1H-indazol-1-yl)- (9CI) (CA INDEX NAME)



L17 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1990:204467 HCAPLUS
DN 112:204467
ED Entered STN: 26 May 1990
TI The use of N-substituted-5,6-dihydroxyindoles as a hair coloring agent
IN Schultz, Thomas M.; Brown, Keith C.; Murphy, Bryan P.; Mayer, Alice A.;
Lim, Mu Ill
PA Bristol-Myers Co., USA
SO Eur. Pat. Appl., 8 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM A61K007-13
CC 62-3 (Essential Oils and Cosmetics)
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|------|----------|-----------------|----------|
| | ----- | | ----- | ----- | ----- |
| PI | EP 335477 | A2 | 19891004 | EP 1989-300514 | 19890119 |
| | EP 335477 | A3 | 19900418 | | |

EP 335477 B1 19930721
 R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
 CA 1324320 A1 19931116 CA 1988-572311 19880718
 AT 91621 E 19930815 AT 1989-300514 19890119
 ES 2058487 T3 19941101 ES 1989-300514 19890119
 JP 01254617 A2 19891011 JP 1989-24141 19890203
 JP 2855205 B2 19990210
 PRAI US 1988-175565 19880331
 EP 1989-300514 19890119
 OS MARPAT 112:204467
 GI



- AB A method for dyeing hair comprises contacting the hair with a solution of a H₂O-soluble metal ion followed by contacting the hair with an N-substituted 5,6-dihydroxyindole I [R = C1-8 alkyl, hydroxy- or aminoalkyl, (substituted) amino- or nitroaryl], or the reverse. Hair is colored light golden to light reddish brown to dark auburn to black, depending on the nature of the metal ion and its concentration, and the pH of the dye. Blended gray hair was treated with pH 9, 1.0% CuSO₄ for 5 min at room temperature, and then with a pH 3 1.0% solution of N-methyl-5,6-dihydroxyindole (II) for 5 min, resulting in a dark charcoal grey color. The same type hair treated the same as above but with II at pH 12 resulted in a black color.
- ST hydroxyindole metal ion hair dye; methyldihydroxyindole copper ion hair dye
- IT Metals, biological studies
 RL: BIOL (Biological study)
 (dihydroxyindole derivs. in combination with, as hair dyes)
- IT Hair preparations
 (dyes, dihydroxyindole derivs. in combination with metal ions as)
- IT 7758-98-7, Cupric sulfate, biological studies
 RL: BIOL (Biological study)
 (N-methyl-dihydroxyindole in combination with, as hair dye)
- IT 3131-52-0D, 5,6-Dihydroxyindole, N-substituted 4821-00-5,
 N-Methyl-5,6-dihydroxyindole 99855-01-3, N-Isopropyl-5,6-dihydroxyindole
 126972-29-0, N-(2,4-Dinitrophenyl)-5,6-dihydroxyindole 126972-30-3,
 N-(4-Nitrophenyl)-5,6-dihydroxyindole **126972-31-4**,
 N-(4-Aminophenyl)-5,6-dihydroxyindole
 RL: BIOL (Biological study)
 (as hair dye in combination with metal ions)
- IT 7439-89-6D, Iron, mixture with dihydroxyindole derivs., biological studies
 7439-92-1D, Lead, mixture with dihydroxyindole derivs., biological studies
 7439-96-5D, Manganese, mixture with dihydroxyindole derivs., biological
 studies 7440-02-0D, Nickel, mixture with dihydroxyindole derivs.,
 biological studies 7440-05-3D, Palladium, mixture with dihydroxyindole
 derivs., biological studies 7440-22-4D, Silver, mixture with
 dihydroxyindole derivs., biological studies 7440-31-5D, Tin, mixture with
 dihydroxyindole derivs., biological studies 7440-32-6D, Titanium, mixture
 with dihydroxyindole derivs., biological studies 7440-47-3D, Chromium,
 mixture with dihydroxyindole derivs., biological studies 7440-48-4D,
 Cobalt, mixture with dihydroxyindole derivs., biological studies

7440-50-8D, Copper, mixture with dihydroxyindole derivs., biological studies
7440-57-5D, Gold, mixture with dihydroxyindole derivs., biological studies
7440-66-6D, Zinc, mixture with dihydroxyindole derivs., biological studies
7440-69-9D, Bismuth, mixture with dihydroxyindole derivs., biological studies

RL: BIOL (Biological study)
(as hair dyes)

IT 557-34-6, Zinc(II) acetate 638-38-0, Manganese(II) acetate 7761-88-8,
Silver nitrate, biological studies 10028-22-5, Ferric sulfate

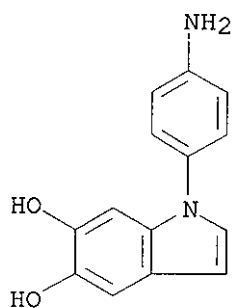
RL: BIOL (Biological study)
(N-methyl-dihydroxyindole in combination with, as hair dye)

IT 126972-31-4, N-(4-Aminophenyl)-5,6-dihydroxyindole

RL: BIOL (Biological study)
(as hair dye in combination with metal ions)

RN 126972-31-4 HCAPLUS

CN 1H-Indole-5,6-diol, 1-(4-aminophenyl)- (9CI) (CA INDEX NAME)



L17 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1979:212244 HCAPLUS

DN 90:212244

ED Entered STN: 12 May 1984

TI Polarographic study of some carbazolo- and dibenzofuranoquinones in
solutions of varying pH at the DME

AU Etaiw, Safaa Hassan

CS Fac. Sci., Tanta Univ., Tanta, Egypt

SO Annali di Chimica (Rome, Italy) (1978), 68(5-6), 421-31

CODEN: ANCRAI; ISSN: 0003-4592

DT Journal

LA English

CC 72-11 (Electrochemistry)

Section cross-reference(s): 22, 27, 43

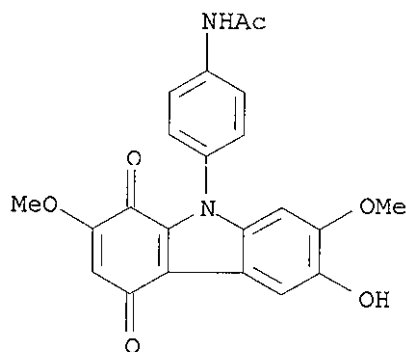
AB The polarog. behavior of carbazoloquinone and dibenzofuranquinone derivs.
in ethanolic-universal buffer mixts. was studied at the dropping Hg
electrode. The polarograms consist of a single reduction wave in solns.
having pH values from 3.0 to 9.5, but of 2 daughter waves in strong alkaline
media. The electrode reaction involves the up-take of 2 electrons and 2
protons. The effect of mol. structure and pH on E1/2, as well as the
reduction mechanism, are discussed. Also, correlations between the
electrochem. and spectroscopic behavior of these compds. were
investigated.

ST polarog carbazolo quinone benzo furan

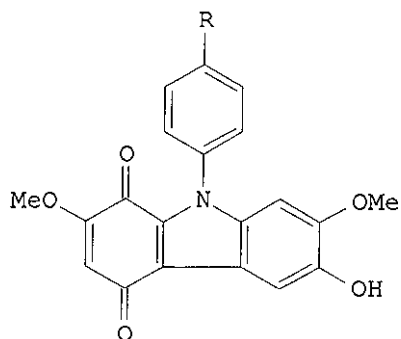
IT Reduction, electrochemical

(of carbazoloquinone and dibenzofuranoquinone derivs.)

IT 36783-65-0 36783-66-1 36783-67-2 36783-68-3 36820-07-2
43042-27-9 43042-29-1 43042-30-4 43042-31-5 50433-97-1
51620-25-8 51620-47-4 51620-56-5 54808-25-2D, derivs.
62983-28-2 64513-58-2 70208-89-8 70377-05-8D, derivs.
RL: PRP (Properties)
(polarog. of, in ethanol media)
IT **62983-28-2**
RL: PRP (Properties)
(polarog. of, in ethanol media)
RN 62983-28-2 HCAPLUS
CN Acetamide, N-[4-(1,4-dihydro-6-hydroxy-2,7-dimethoxy-1,4-dioxo-9H-carbazol-9-yl)phenyl]- (9CI) (CA INDEX NAME)

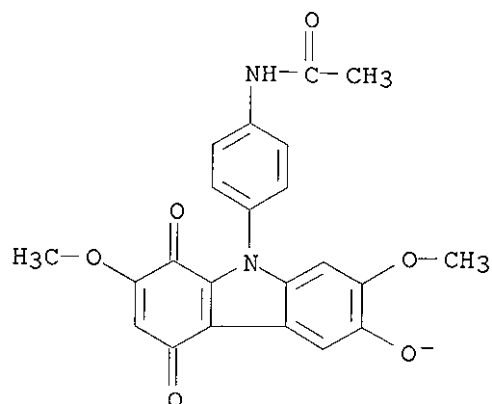


L17 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1977:421795 HCAPLUS
DN 87:21795
ED Entered STN: 12 May 1984
TI The electronic and vibrational spectra of some N-substituted
carbazoloquinones
AU Issa, I. M.; El-Samahy, A. A.; Issa, R. M.; El-Kashef, H. S.; Etaiw, S. H.
CS Fac. Sci., Tanta Univ., Tanta, Egypt
SO Revue Roumaine de Chimie (1977), 22(3), 411-19
CODEN: RRCHAX; ISSN: 0035-3930
DT Journal
LA English
CC 22-2 (Physical Organic Chemistry)
GI



I

- AB The bands in the UV of I (R = H, NHAc, OMe, OH, Me, Cl, CO₂H) are assigned and the solvent effects discussed. The 480 nm band is assigned to the intramol. charge-transfer from the N atom to the quinone ring, based on solvent and substituent effects. The pK of I, λ_{max} for I and its anion, and the ϵ for I and its anion are linearly related to σ . The IR of I are discussed.
- ST UV carbazoloquinone substituent effect; IR carbazoloquinone substituent effect; acidity carbazoloquinone; charge transfer carbazoloquinone; LFER carbazoloquinone UV IR
- IT Carbonyl group
(IR of, in N-substituted carbazoloquinones)
- IT Linear free energy relationship
(for UV and IR of N-substituted carbazoloquinones)
- IT Reaction constant
(for acidity of hydroxycarbazoloquinones)
- IT Ultraviolet and visible spectra
(of N-substituted carbazoloquinones, solvent and substituent effects on)
- IT Ionization in liquids
(of N-substituted hydroxycarbazoloquinones, UV in relation to)
- IT Solvation
(of carbazoloquinones in ground and excited states, charge-transfer in relation to)
- IT Infrared spectra
(of carbazoloquinones, substituent effect on)
- IT Free energy
(of ionization of hydroxycarbazoloquinones)
- IT Energy level transition
(electronic, of N-substituted carbazoloquinones)
- IT Electron exchange
(intramol., in carbazoloquinones, solvent and substituent effects on)
- IT Energy level transition
(vibrational, of N-substituted carbazoloquinones)
- IT 62983-29-3 62983-30-6 62983-31-7 62983-32-8 62983-33-9
63026-84-6
RL: PRP (Properties)
(UV of)
- IT 43042-33-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclocondensation reaction of, with anilines)
- IT 36783-68-3 36820-07-2 51620-25-8 51620-47-4 51620-56-5
62983-28-2
RL: PRP (Properties)
(dissociation constant, IR, and UV of, solvent effect on)
- IT **63026-84-6**
RL: PRP (Properties)
(UV of)
- RN 63026-84-6 HCAPLUS
- CN Acetamide, N-[4-(1,4-dihydro-6-hydroxy-2,7-dimethoxy-1,4-dioxo-9H-carbazol-9-yl)phenyl]-, ion(1-) (9CI) (CA INDEX NAME)



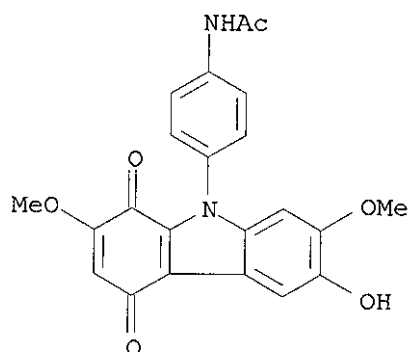
IT 62983-28-2

RL: PRP (Properties)

(dissociation constant, IR, and UV of, solvent effect on)

RN 62983-28-2 HCAPLUS

CN Acetamide, N-[4-(1,4-dihydro-6-hydroxy-2,7-dimethoxy-1,4-dioxo-9H-carbazol-9-yl)phenyl]- (9CI) (CA INDEX NAME)



L17 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1974:95653 HCAPLUS

DN 80:95653

ED Entered STN: 12 May 1984

TI Heterocyclic quinones. III. New carbazoloquinones from dimethoxydiquinone and various substituted amino compounds

AU Hammam, Ahmed S.

CS Dep. Chem., Univ. Assiut, Assiut, Egypt

SO Egyptian Journal of Chemistry (1972), 15(5), 391-410

CODEN: EGJCA3; ISSN: 0449-2285

DT Journal

LA English

CC 27-11 (Heterocyclic Compounds (One Hetero Atom))

Section cross-reference(s): 22, 1, 34

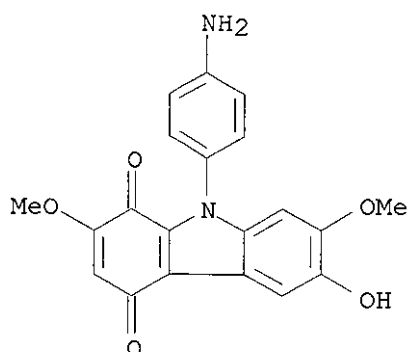
GI For diagram(s), see printed CA Issue.

AB The reaction of amino compds. containing deactivating groups (e.g., p-O₂NC₆H₄NH₂, p-H₂NC₆H₄COMe, amino acids, or acid amides) with 4,4'-dimethoxydiquinone (I) failed. I and amino acids did react in the

presence of Na_2CO_3 , NaHCO_3 , or pyridine to give acidic carbazoloquinones. I and o- $\text{H}_2\text{NC}_6\text{H}_4\text{CO}_2\text{H}$ gave the blue-violet reduction product II in alc., the carbazoloquinone (III, $\text{R} = \text{o-HO}_2\text{CC}_6\text{H}_4$) in ethylene glycol-pyridine, and the quinone (IV) in ethylene glycol. I and NH_2OH gave III ($\text{R} = \text{OH}$). I and NH_2NH_2 gave II. Approx. ten III were prepared including III ($\text{R} = \text{p-HO}_3\text{SC}_6\text{H}_4$) (V) which was a tranquilizer with ED_{50} 250 mg/kg and LD_{50} 825 mg/kg; V was also a potentiator for tranquilizers. The substituent effect on the uv spectra of III was discussed.

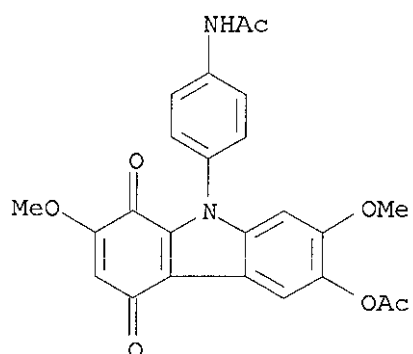
- ST methoxydiquinone amine condensation; carbazoloquinone tranquilizer; UV carbazoloquinone substituent effect; amino acid methoxydiquinone condensation
- IT Tranquilizers
(carbazoloquinones as)
- IT Ultraviolet and visible spectra
(of carbazoloquinones, substituent effect on)
- IT Amines, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(with dimethoxydiquinone)
- IT 51620-26-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and tranquilizer properties of)
- IT 43042-31-5P 51620-27-0P 51620-47-4P 51620-48-5P 51620-49-6P
51620-50-9P 51620-51-0P 51620-52-1P 51620-53-2P 51620-54-3P
51620-55-4P 51620-56-5P 51620-57-6P 51620-58-7P **51620-59-8P**
51620-60-1P 51620-61-2P 51620-62-3P 51620-63-4P
51620-64-5P 51620-65-6P 51620-66-7P 51620-67-8P 51620-68-9P
51620-69-0P 51620-70-3P 51620-71-4P 51620-72-5P 51620-73-6P
51620-74-7P 51620-75-8P 51823-28-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
- IT 43042-33-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with amines)
- IT 74-89-5 75-04-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with carbazoloquinones)
- IT 56-40-6, reactions 90-04-0 95-51-2 106-40-1 106-47-8 106-50-3,
reactions 107-95-9 118-92-3 121-57-3 123-30-8 150-13-0
540-37-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with dimethoxydiquinone)
- IT 51620-25-8 51620-26-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with ethylamine)
- IT 51620-46-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with methyleneamine)
- IT 302-01-2, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reduction of dimethoxydiquinone by)
- IT 7803-49-8, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(with dimethoxydiquinone)
- IT **51620-59-8P 51620-60-1P 51620-61-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
- RN 51620-59-8 HCAPLUS
- CN 1H-Carbazole-1,4(9H)-dione, 9-(4-aminophenyl)-6-hydroxy-2,7-dimethoxy-

(9CI) (CA INDEX NAME)



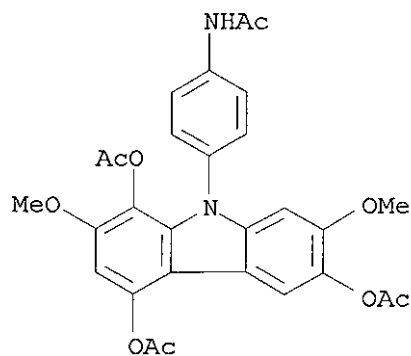
RN 51620-60-1 HCAPLUS

CN Acetamide, N-[4-[6-(acetyloxy)-1,4-dihydro-2,7-dimethoxy-1,4-dioxo-9H-carbazol-9-yl]phenyl]- (9CI) (CA INDEX NAME)



RN 51620-61-2 HCAPLUS

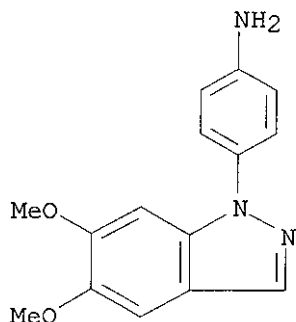
CN Acetamide, N-[4-[1,4,6-tris(acetyloxy)-2,7-dimethoxy-9H-carbazol-9-yl]phenyl]- (9CI) (CA INDEX NAME)

L17 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1966:499303 HCAPLUS

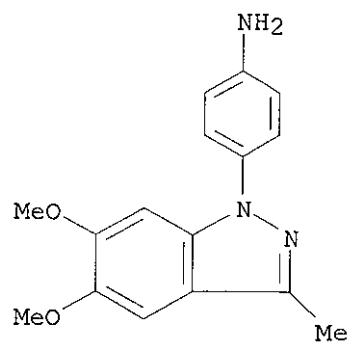
KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

DN 65:99303
OREF 65:18573g-h
ED Entered STN: 22 Apr 2001
TI Synthesis of indazoles using polyphosphoric acid. I
AU Dennler, E. B.; Frasca, A. R.
CS Lab. Quim. Org. Fac. Cienc. Exact. Nat., Buenos Aires
SO Tetrahedron (1966), 22(9), 3131-41
CODEN: TETRAB; ISSN: 0040-4020
DT Journal
LA English
CC 38 (Heterocyclic Compounds (More Than One Hetero Atom))
OS CASREACT 65:99303
AB Indazoles were synthesized from nitrophenylhydrazones of several acetophenones, benzaldehydes and benzophenones, employing polyphosphoric acid as catalyst.
IT Catalysts and Catalysis
(in indazole synthesis, polyphosphoric acid as)
IT Acetophenone, 2',5'-dimethoxy-, (p-nitrophenyl)hydrazone
Thiazolo[5,4-f]quinoline-8-carboxylic acid, 7-(o-hydroxyphenyl)-2-methyl-, 8-lactone
IT 271-44-3, Indazole
(derivs., synthesis with polyphosphoric acid catalysts)
IT 7664-38-2, Phosphoric acid
(polyphosphoric acid catalysts, in indazole synthesis)
IT 1575-21-9, 1H-Indazole, 1-(p-nitrophenyl)-3-phenyl- 2675-26-5, Acetophenone, 4'-bromo-, (p-nitrophenyl)hydrazone 2675-27-6, Acetophenone, 4'-ethoxy-, (p-nitrophenyl)hydrazone 3176-62-3, 1H-Indazole, 3-methyl- 4106-21-2, 1H-Indazole, 3-methyl-1-(p-nitrophenyl)- 4106-23-4, 1H-Indazole, 6-methoxy-3-methyl-1-(p-nitrophenyl)- 7714-54-7, Acetophenone, 2',4'-dimethyl-, (m-nitrophenyl)hydrazone 7714-55-8, Acetophenone, (o-nitrophenyl)hydrazone 7714-56-9, Acetophenone, 4'-chloro-, (o-nitrophenyl)hydrazone 7746-02-3, Thiazolo[4,5-f]quinoline-8-carboxylic acid, 7-(o-hydroxyphenyl)-2-methyl-, 8-lactone 7746-04-5, 1(2H)-Naphthalenone, 3,4-dihydro-, 6-benzothiazolylhydrazone 7746-07-8, 1(2H)-Naphthalenone, 3,4-dihydro-6,7-dimethyl-, (2-methyl-6-benzothiazolyl)hydrazone 7746-10-3, 1H-Indazole, 4-chloro-3-methyl-1-(p-nitrophenyl)- 7746-11-4, 1H-Indazole, 6-bromo-3-methyl-1-(p-nitrophenyl)- 7746-12-5, 1H-Indazole, 3,6-dimethyl-1-(p-nitrophenyl)- 7746-13-6, 1H-Indazole, 6-ethyl-3-methyl-1-(p-nitrophenyl)- 7746-15-8, 1H-Indazole, 6-ethoxy-3-methyl-1-(p-nitrophenyl)- 7746-16-9, 1H-Indazole, 3-methyl-1-(p-nitrophenyl)-6-phenyl- 7746-17-0, 1H-Indazole, 3,4,6-trimethyl-1-(p-nitrophenyl)- 7746-18-1, 1H-Indazole, 4,6-dimethoxy-3-methyl-1-(p-nitrophenyl)- 7746-19-2, 1H-Indazole, 5,6-dimethoxy-3-methyl-1-(p-nitrophenyl)- 7746-20-5, 1H-Indazole, 6-methoxy-1-(p-nitrophenyl)- 7746-21-6, 1H-Indazol-6-ol, 5-methoxy-1-(p-nitrophenyl)- 7746-22-7, 1H-Indazole, 5,6-dimethoxy-1-(p-nitrophenyl)- 7746-23-8, 1H-Indazole, 1-(p-aminophenyl)-3,6-dimethyl- 7746-24-9, 1H-Indazole, 1-(p-aminophenyl)-6-methoxy-3-methyl- 7746-25-0, 1H-Indazole, 1-(p-aminophenyl)-5,6-dimethoxy- 7746-26-1, 1H-Indazole, 1-(p-aminophenyl)-5,6-dimethoxy-3-methyl- 7746-27-2, 1H-Indazole, 6-bromo-3-methyl- 7746-28-3, 1H-Indazole, 3,6-dimethyl- 7746-29-4, 1H-Indazole, 6-methoxy-3-methyl- 7746-31-8, 1H-Indazole, 5,6-dimethoxy-3-methyl- 7746-32-9, 1H-Indazole, 1,1'-(azoxydi-p-phenylene)bis[3-methyl- 7746-33-0, 1H-Indazole, 1,1'-(azodi-p-phenylene)bis[3-methyl- 7746-35-2, 1H-Indazole, 3-methyl-1-(m-

nitrophenyl)- 7746-37-4, 1H-Indazole, 6-chloro-3-methyl-1-(m-nitrophenyl)- 7746-38-5, Indole, 2-(p-chlorophenyl)-4-nitro- 7746-39-6, Indole, 2-(p-chlorophenyl)-6-nitro- 7746-40-9, 1H-Indazole, 3,6-dimethyl-1-(m-nitrophenyl)- 7746-41-0, Indole, 4-nitro-2-p-tolyl- 7746-42-1, Indole, 6-nitro-2-p-tolyl- 7746-43-2, 1H-Indazole, 6-methoxy-3-methyl-1-(m-nitrophenyl)- 7746-44-3, 1H-Indazole, 3-methyl-1-(m-nitrophenyl)-6-phenyl- 7746-45-4, 1H-Indazole, 3,4,6-trimethyl-1-(m-nitrophenyl)- 7746-47-6, Acetophenone, 3'-hydroxy-, (p-nitrophenyl)hydrazone 7746-48-7, Acetophenone, 4'-hydroxy-, (p-nitrophenyl)hydrazone 7746-49-8, Acetophenone, 4'-ethyl-, (p-nitrophenyl)hydrazone 7746-51-2, Acetophenone, 4'-phenyl-, (p-nitrophenyl)hydrazone 7746-52-3, Acetophenone, 2'-nitro-, (p-nitrophenyl)hydrazone 7746-53-4, Acetophenone, 4'-hydroxy-, (p-nitrophenyl)hydrazone, acetate (ester) 7746-54-5, Acetophenone, 2',4'-dimethyl-, (p-nitrophenyl)hydrazone 7746-55-6, Acetophenone, 2',4'-dimethoxy-, (p-nitrophenyl)hydrazone 7746-57-8, Acetophenone, 2',4',5'-trimethyl-, (p-nitrophenyl)hydrazone 7746-58-9, Acetophenone, (m-nitrophenyl)hydrazone 7746-59-0, Acetophenone, 4'-chloro-, (m-nitrophenyl)hydrazone 7746-60-3, Acetophenone, 4'-methyl-, (m-nitrophenyl)hydrazone 7746-61-4, Acetophenone, 4'-methoxy-, (m-nitrophenyl)hydrazone 7759-57-1, Thiazolo[4,5-f]quinoline-8-carboxylic acid, 7-(o-hydroxyphenyl)-, 8-lactone 7759-58-2, Thiazolo[5,4-f]quinoline-8-carboxylic acid, 7-(o-hydroxyphenyl)-, 8-lactone 7765-63-1, Acetophenone, 4'-phenyl-, (m-nitrophenyl)hydrazone 7767-82-0, Acetophenone, 4'-methyl-, (o-nitrophenyl)hydrazone 7767-83-1, Acetophenone, 4'-methoxy-, (o-nitrophenyl)hydrazone 7788-02-5, 1H-Indazole, 6-methoxy-3-(p-methoxyphenyl)-1-(p-nitrophenyl)- 7788-03-6, 1H-Indazole, 1-(p-aminophenyl)-3-methyl- 7788-04-7, 1H-Indazole, 1-(p-aminophenyl)-6-bromo-3-methyl- 10550-35-3, 1H-Indazole, 6-chloro-3-methyl-1-(p-nitrophenyl)- 10550-36-4, 1H-Indazol-6-ol, 3-methyl-1-(p-nitrophenyl)-, acetate (ester) 14888-76-7, 1H-Indazole, 3-methyl-, picrate 90557-61-2, 1H-Indazole, 6,7-dimethoxy-
(preparation of)
IT 7746-25-0, 1H-Indazole, 1-(p-aminophenyl)-5,6-dimethoxy-
7746-26-1, 1H-Indazole, 1-(p-aminophenyl)-5,6-dimethoxy-3-methyl-
(preparation of)
RN 7746-25-0 HCAPLUS
CN Benzenamine, 4-(5,6-dimethoxy-1H-indazol-1-yl)- (9CI) (CA INDEX NAME)



RN 7746-26-1 HCAPLUS
CN Benzenamine, 4-(5,6-dimethoxy-3-methyl-1H-indazol-1-yl)- (9CI) (CA INDEX NAME)



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